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SB 409
MAKING AN APPROPRIATION TO CONTROL FIRETREE INFESTATION

Statement for
Senate Committee on
Agriculture and Environment
Public Hearing - February 9, 1989

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SB 409 appropriately calls attention to the very serious problem of firetree infestation and would provide funds to develop methods to control their spread.

Our statement on this bill does not represent an institutional position of the University of Hawaii.

Firetree is a major problem on Hawaii and Kauai, a growing problem on Oahu and a potential problem on Maui and Lanai. It was recognized by the Interagency Forest Pest Control Committee, a panel of federal and state agencies, as one of the highest priority weeds needing biological control research. Researchers at the University of Hawaii Department of Botany and Stanford University have obtained $650,000 from the National Science Foundation (NSF) over six years to study some aspects of the ecological physiology of this species. The U.S. Forest Service has spent over $100,000 over the last two years and the National Park Service over $200,000 during the last five years on the biological control of the species. The park service had previously spent large sums of money trying to control the species at Hawaii Volcanoes Park by conventional means. They gave up because they were not able to keep up with the rate of new infestations. They now kill the trees only in the headquarters area and along the highway through the park. The NSF money will last another two years. The Forest and Park Services will be spending a total of approximately $150,000 on this problem during this fiscal year. These federal programs are expected to continue, assuming that the federal deficit problem is resolved. Three technical publications and at least ten scientific papers have been published on this species' distribution in

the Islands, its biology and potential for biological control. These facts substantiate the enormous concern that exists at the national level of the impact of this plant on natural and agricultural systems.

The tree spreads rapidly. Alien birds, such as the Japanese white-eye and the house finch, gorge on the fleshy fruit and disperse the seeds over large distances. The seed is normally dropped under a tree. In the case of ohia the firetree grows up through the ohia and smothers or weakens it within ten years. A similar scenario occurs in ranchland. The infestation intensifies rapidly because the trees are able to set seed within two years of establishment. Dense thickets of firetree are generally formed within 15 years of the initial infestation. Large areas of ranch and native forest are now infested on the Big Island. On Kauai the infestation exploded in the Kokee area after Hurricane Iwa. Ohia and koa forests are jeopardized as well as all of the species dependent on them, many of which are endangered. Watersheds are seriously degraded by the tree.

We encourage the State to become involved in the ongoing federal biological control work. The State DOA is already spending significant sums of money controlling this species by conventional means on the Big Island. Biological control offers the opportunity to solve this problem without resorting to costly manual or potentially dangerous chemical programs. Though biological control is expensive upfront in terms of the outlay for research, the President's Scientific Advisory Committee has reported that the payback on the money invested in successful biological control programs is a minimum of $30 for every $1 spent on R & D.